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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/737,008	12/16/2003	Lior Porat	5760-14500	4517	
	7590 RTONS, HOOD, KIVLIN, KOWERT & GOETZEL, P.C.		EXAMINER		
P.O. BOX 398 AUSTIN, TX 78767-0398			LONG, ANDREA NATAE		
AUSTIN, IX /	8/6/-0398		ART UNIT PAPER NUMBER		
			2176		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
Office Action Comments	10/737,008	PORAT ET AL.				
Office Action Summary	Examiner	Art Unit				
	Andrea N. Long	2176				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence ad	dress			
A SHORTENED STATUTORY PERIOD FOR REPLY WHICHEVER IS LONGER, FROM THE MAILING DA - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tim vill apply and will expire SIX (6) MONTHS from cause the application to become ABANDONE	J. lely filed the mailing date of this α (35 U.S.C. § 133).	,			
Status						
1)⊠ Responsive to communication(s) filed on 20 Fe	ebruary 2008.					
3) Since this application is in condition for allowar	nce except for formal matters, pro	secution as to the	e merits is			
closed in accordance with the practice under E	x parte Quayle, 1935 C.D. 11, 45	3 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-40</u> is/are pending in the application.						
5) Claim(s) is/are allowed.	4a) Of the above claim(s) is/are withdrawn from consideration.					
6)⊠ Claim(s) <u>1-40</u> is/are rejected.	· · · · · · · · · · · · · · · · · · ·					
7) Claim(s) is/are objected to.						
· · · · · · · · · · · · · · · · · · ·	· <u> </u>					
Application Papers	·					
··· _						
9) The specification is objected to by the Examiner.						
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the			ED 1 101/d)			
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
	animer. Note the attached Office	Action of formal a	0-102.			
Priority under 35 U.S.C. § 119						
 12) ☐ Acknowledgment is made of a claim for foreign a) ☐ All b) ☐ Some * c) ☐ None of: 1. ☐ Certified copies of the priority documents 2. ☐ Certified copies of the priority documents 	s have been received.					
application from the International Bureau	3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).					
* See the attached detailed Office action for a list	of the certified copies not receive	d.				
Attachment(s)						
1) Notice of References Cited (PTO-892)	4) Interview Summary					
2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08)	Paper No(s)/Mail Da 5) Notice of Informal P					
Paper No(s)/Mail Date	6) Other:	, F				

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FINAL ACTION

Applicant's Response

In Applicant's Responses dated 02/20/2008, Applicant argued against all objections and rejections previously set forth in the Office Action dated 11/26/2007.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 10, 19, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Planas et al (US Patent 6112015), hereinafter "Planas" in view of Glaser (US Patent 5889520), hereinafter "Glaser".

For the convenience of the Applicant, the Examiner has pointed out particular references contained in the prior arts of record in the body of this action. Although the specified citations are representation of the teachings in the art and are applied to the specific limitations within the individual claim, other passages and figures may apply as well. The Applicant should consider the entire reference(s) as applicable as to the limitations of the claims.

As to independent claims 1, 10, 19, and 28-40, Planas teaches monitoring a plurality of network objects (column 2 lines 52-54), wherein said monitoring includes tracking one or more attributes (states and statuses) associated with each of the network objects (column 2 lines 63-67);

displaying a plurality of objects each corresponding to a respective one of the

network objects (column 2 lines 26-28, Fig. 4a);

in response to detecting a change in the one or more attributes associated with a given network object, altering the appearance of the corresponding object to reflect said change (column 8 lines 17-25, Fig. 20 → Planas teaches when the state or status changes for a network object, the attributes (e.g. border, texture, or perimeter) change or modifiers are added). Planas does not explicitly teach monitoring application tiers and wherein the application tiers execute on one or more server computers, wherein said monitoring is performed by agent software executing on each of the one or more server computers. Glaser teaches a system similar to that of Planas, which provides monitoring of a multi-tier network (column 7 lines 28-42).

Monitoring of the application tiers is handled by a Rapid Application Development tool (column 4 lines 48-67). Glaser additionally provides visual and graphical representations of objects (app files), which provides a visual indication on the performance of the application tiers (column 8 line 38 through column 9 line 7).

It would have been obvious to one skilled in the art at the time the invention was made to have expanded the monitoring system of Planas by combining the teaches of monitoring application tiers of Glaser to provide detailed, easily conveyed, simplified view of the network connectivity, activities, and performance to a user.

As to dependent claim 29, 36, and 40, note the discussion above of Planas' monitoring system and implementing that system to include the monitoring of application tiers. In addition Glaser teaches wherein the application tiers comprise on or more of a database software application, a storage software application or a web service software application (Fig. 6).

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As to dependent claim 30, Planas teaches monitoring the performance of network objects. Planas does not teach application tiers and determining a performance view across a plurality of the application tiers. Glaser teaches application tiers and determining a performance view across a plurality of the application tiers (column 8 lines 38-67).

It would have been obvious to one skilled in the art at the time the invention was made to have expanded the monitoring system of Planas by combining the teaches of monitoring application tiers of Glaser to provide detailed, easily conveyed, simplified view of the network connectivity, activities, and performance to a user.

As to dependent claim 31, Planas teaches monitoring the performance of network objects. Planas does not teach application tiers and measuring segmented response times between at least two application tiers. Glaser teaches application tiers and measuring segmented response times between at least two application tiers (column 8 lines 55-65).

It would have been obvious to one skilled in the art at the time the invention was made to have expanded the monitoring system of Planas by combining the teaches of monitoring application tiers of Glaser to provide detailed, easily conveyed, simplified view of the network connectivity, activities, and performance to a user.

As to dependent claim 32, 33, 34, 35, 37, 38, and 39, note the discussion above, Planas teaches a network monitoring system which provides visual indicators of attributes of objects within the network. Planas does not teach application tiers and agent modules executing on the

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application tiers. Glaser teaches the shortcomings of Planas. Glaser discloses that the application tiers can be implemented or one or more computer servers (column 3 lines 25-29) and having a Rapid Application Development tool for monitoring the application tiers. Glaser specifically teaches three tiers which include a database application, application server, and a storage application (Fig. 6). As stated before being that each application can be implemented on different servers, that infers to one skilled in the art that the Rapid Application Development tool would be implemented on each server to collect, store, and display information accordingly.

It would have been obvious to one skilled in the art at the time the invention was made to have expanded the monitoring system of Planas by combining the teaches of monitoring application tiers of Glaser to provide detailed, easily conveyed, simplified view of the network connectivity, activities, and performance to a user.

Claims 2-4, 6, 7, 11-13, 15, 16, 20-22, 24, and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Planas in view of Glaser in further view of Enchanted Learning (Graphic Organizers, web page updated 10/03/2003), hereinafter "Enchanted Learning".

As to dependent claims 2, 11, and 20, Planas teaches objects (Figs. 2a through 2d) and indicators (Figs. 5 through 19). However, Planas does not teach wherein each of the plurality of objects includes a core object and one or more indicators in proximity to the core object.

Enchanted Learning teaches using star graphs to organize data about multiple traits or attributes (indicator) associated with a single topic (core object) (page 6, Fig. 1).

It would have been obvious to one skilled in the art at the time the invention was made to use a star diagram to represent a performance system to give operators the ability to quickly visually interpret the state of the network at any time (column 4 lines $66-67 \rightarrow \text{Planas}$) and is a pictorial way of constructing knowledge and organizing information which can convert and compress information into a structured, simple-to-read, graphic display (page $1 \rightarrow \text{Enchanted}$ Learning).

As to dependent claims 3, 12, and 21, Planas teaches wherein said altering comprises altering the appearance of the one or more indicators (column 12 lines 10-31).

As to dependent claims 4, 13, and 22, Planas teaches wherein said altering further comprises altering the color of the one or more indicators (column 12 lines 10-31).

As to dependent claims 6, 15, and 24, note the discussion above, Planas teaches indicators. However, Planas does not teach wherein the one or more indicators are arranged around the displayed object. Enchanted Learning teaches using star graphs to organize data about multiple traits or attributes (indicator) associated with a single topic (core object) (page 6, Fig. 1).

It would have been obvious to one skilled in the art at the time the invention was made to use a star diagram to represent a performance system to give operators the ability to quickly visually interpret the state of the network at any time (column 4 lines $66-67 \rightarrow \text{Planas}$) and is a pictorial way of constructing knowledge and organizing information which can convert and compress information into a structured, simple-to-read, graphic display (page $1 \rightarrow \text{Enchanted}$ Learning).

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As to dependent claims 7, 16, and 25, Planas teaches a plurality of indicators, note the discussion above. However, Planas does not teach wherein each of the plurality of indicators corresponds to a different attribute of the network objects. Enchanted Learning teaches a star diagram that is used to organize data about multiple attributes associated with a single topic.

It would have been obvious to one skilled in the art at the time the invention was made to use a star diagram to represent a performance system to give operators the ability to quickly visually interpret the state of the network at any time (column 4 lines $66-67 \rightarrow \text{Planas}$) and is a pictorial way of constructing knowledge and organizing information which can convert and compress information into a structured, simple-to-read, graphic display (page $1 \rightarrow \text{Enchanted}$ Learning).

Claims 9, 18, and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Planas in view of Glaser in further view of McMillian et al (US Patent 5926176), hereinafter "McMillian".

As to dependent claims 9, 18, and 27, note the discussion above, Planas teaches monitoring the performance of a network and objects being connected (column 5 lines 49-65). However, Planas does not teach application tiers and wherein each of the one or more of objects is connected by a directional arrow, wherein the directional arrow represents the data flow between the pluralities of network objects. Glaser teaches monitoring of application tiers.

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McMillian teaches using a flowchart (Fig. 3, column 1 lines 39-43). It is well known that a flowchart uses direction arrows to show the flow of information.

Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have used a flowchart to illustrate a performance monitoring system to make it easier for an engineer or programmer to visualize how the application's performance is operating (column 1 lines 39-49).

Claims 5, 14, and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Planas in view of Glaser in further view of Enchanted Learning in further view of McMillian.

As to dependent claims 5, 14, and 23, Planas as modified by Enchanted Learning teaches an alert (alarm) "Critical", "Major", and "Minor", with each alarm being associated with a color. No alarm would be the normal color of the object (column 12 lines 10-43). However, Planas does not teach coloring the one or more indicators blue for a no-alert status, coloring the indicators yellow for a near- critical alert status, and coloring the indicators red for a critical alert status. McMillian teaches runtime conditions of with the following color scheme of red to indicate blocks executed every time, yellow to indicate blocks executed at least once but not every time, and blue to indicate never executed (column 7 lines 10-15). It is reasonable for the color scheme of McMillian to be equivalent to coloring the one or more indicators blue for a no-alert status (never executed), coloring the indicators yellow for a near- critical alert status

(executed as least once but not always executed), and coloring the indicators red for a critical alert status (always executed).

It would have been obvious to one skilled in the art at the time the invention was made to have combined the alarms of Planas as modified by Enchanted Learning with the coloring scheme of McMillian to readily communicate to the human operator which alarm is associated with the object.

Claims 8, 17, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Planas in view of Glaser in further view of Enchanted Learning.

As to dependent claims 8, 17, and 26, note the discussion above, Planas as modified by Enchanted Learning teaches monitoring attributes. However, Planas does not teach wherein the monitored attributes include performance trending, current performance, current load, load trending, service, maintenance, and a custom aspect. Official Notice is taken that it is old and well known that the attributes of performance trending, current performance, current load, load trending, service, maintenance, and a custom aspect, which take place in application performance monitoring systems, which is also taught in Applicant's Background of the Invention, page 2 lines 1-8.

It would have been obvious to one skilled in the art at the time the invention was made to have included attributes of performance trending, current performance, current load, load trending, service, maintenance, and a custom aspect, to account for a complete and accurate performance monitoring system.

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Response to Arguments

Applicant's arguments filed 02/20/2008 have been fully considered but they are not persuasive.

Applicant asserts that Planas fails to teach or suggest monitoring a plurality of application tiers, wherein said monitoring includes tracking one or more attributes associated with each of the application tiers.

The Examiner disagrees.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Applicant fails to address the teachings of Planas in combination with Glaser in respect to the limitation of monitoring a plurality of application tiers, wherein said monitoring includes tracking one or more attributes associated with each of the application tiers. Planas teaches monitoring network objects by tracking attributes associated with the network objects. It is however Glaser, which was discussed in the Office Action mailed 11/26/2007, that teaches monitoring a multi-tier network (column 7 lines 28-42). Taking into consideration the ability to monitor application tiers by representing them as icons as that of Glaser in addition to using additional attributes associated with the icons as that of Planas, provides for the teaching of the above limitation.

Applicant asserts that Glaser fails to teach wherein the application tiers execute on one or more server computers, wherein said monitoring is performed by agent software executing on each of the one or more server computers.

The Examiner disagrees.

Glaser's development environment, Rapid Application Development (RAD) tool provides for the monitoring of the application tiers. As stated by the Applicant (page 4, Applicant's Arguments submitted 02/20/2008), Glaser teaches "receiving a data structure containing performance information and the performance information is obtained from the network manager, database manager, and/or web managers. Glaser RAD tool is additionally reasonable equivalent to software agents executing on server computers monitoring application tiers, because the RAD tool incorporates an Integrated Development Environment (IDE) that is used to design, develop, deploy, and debug computer programming. The RAD assists in data access, data manipulation and data rendering, all in which can be included in monitoring the application tiers.

Applicant asserts that the cited art fails to teach or suggest displaying a plurality of objects each corresponding to a respective one of the application tires.

The Examiner disagrees.

Figure 6 of Glaser provides a clear view of a graphical user interface that has a plurality of objects each corresponding to a respective one of the application tiers. The vertical lines on the screen could represent to one skilled in the art a distinction of one tier from the other, while

the circles and boxes with corresponding text would represents objects with the Tiers (ex.

server).

Applicant asserts that the cited are fails to disclose in response to detecting a change in the one or more attributes associated with the given application tier, altering the appearance of the corresponding object to reflect said change.

The Examiner disagrees.

Note the discussion above, Glaser teaches monitoring application tiers. Planas teaches detecting changes of the attributes associated with an object, and altering the appearance of the corresponding object to reflect the change. While Planas may teach just network objects, it is the combination of Planas and Glaser that teaches the above limitation. Applicant appears to be arguing that the present invention only displays one icon (a tier icon) as the visual representation of the tiers. However the current claim language only requires representation of tiers which is shown by Glaser by the separation of the tiers in Figure 6.

Applicant asserts that a proper motivation to combine Planas and Glaser has not been provided. Specifically the motivation provided by the Examiner is simply a statement of presumed benefit of Applicant's invention.

The Examiner disagrees.

The Examiners motivation to combine Planas and Glaser while the Applicant may feel is a broad motivation it is one that is expressed in both reference and is well known advantage to one skilled in the art. Further both references are analogous in art and seek to solve the same

problem, which is monitoring of objects in a network whether individually or as a tier and also to improve network management (column 2 lines 14-15, Planas) and to identify the network performance bottlenecks and optimize the network resources accordingly (page 2 lines 19-24).

Applicant asserts that the references fail to teach or suggest wherein each of the plurality of indicators corresponds to a different attribute of the application tier.

The Examiner disagrees.

It should be noted that the Applicant's arguments attack only the references of Planas and Enchanted Learning, however it is the Glaser reference that teaches the applications tiers and is therefore the combination of the reference that teaches the above limitation. Enchanted Learning's discloses organizing data about multiple attributes associated with a single topic. Using the application tiers of Glaser as the single topic would account for the indicators to correspond to a different attribute of the application tier.

Applicant asserts that the cited references fails to teach wherein each of the one or more objects is connected by a directional arrow, wherein the directional arrow represents the data flow between the plurality of application tiers.

The Examiner disagrees.

McMillan's flowcharts include directional arrows. While those arrows may represent logic flow, the mere use of the arrows to show informational flow would provide one the knowledge of data flow following the direction of the arrows. Also directional arrows are stated

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in the Office Action dated 11/26/2007 are well known to one skilled in the art to show information flow.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea N. Long whose telephone number is 571-270-1055. The examiner can normally be reached on Mon - Thurs 6:00 am to 3:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Doug Hutton can be reached on 571-272-4137. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Andrea Long May 19, 2008

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